

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
3 February 2005 (03.02.2005)

PCT

(10) International Publication Number  
**WO 2005/009421 A2**

(51) International Patent Classification<sup>7</sup>: **A61K 31/015**,  
31/136, A61P 23/00, 29/00

TREEDE, Rolf-Detlef [DE/DE]; Theodor-Storm-Weg 11,  
55127 Mainz (DE).

(21) International Application Number:  
**PCT/IB2004/003043**

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: **28 July 2004 (28.07.2004)**

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data:  
60/490,865 28 July 2003 (28.07.2003) US  
60/526,825 2 December 2003 (02.12.2003) US  
60/537,215 16 January 2004 (16.01.2004) US

(71) Applicant (*for all designated States except US*): **MERZ PHARMACEUTICALS GMBH & CO. KGAA** [DE/DE]; Eckenheimer Landstr. 100, 60318 Frankfurt am Main (DE).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/009421 A2

(54) Title: THE USE OF 1-AMINO-ALKYLCYCLOHEXANE COMPOUNDS IN THE TREATMENT OF PAIN HYPERSENSITIVITY

(57) Abstract: The invention relates to a novel use of 1-amino-alkylcyclohexane NMDA receptor antagonists such as neramexane in the treatment of pain hypersensitivity and neuropathic pain.

CORRECTED VERSION

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
3 February 2005 (03.02.2005)

PCT

(10) International Publication Number  
**WO 2005/009421 A2**

(51) International Patent Classification<sup>7</sup>: A61K 31/015, 31/136, A61P 23/00, 29/00

(21) International Application Number: PCT/IB2004/003043

(22) International Filing Date: 28 July 2004 (28.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/490,865 28 July 2003 (28.07.2003) US  
60/526,825 2 December 2003 (02.12.2003) US  
60/537,215 16 January 2004 (16.01.2004) US

(71) Applicant (for all designated States except US): MERZ PHARMA GMBH & CO. KGAA [DE/DE]; Eckenheimer Landstr. 100, 60318 Frankfurt am Main (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MAGERL, Walter [DE/DE]; Kästrich 12d, 55116 Mainz (DE). KLEIN, Thomas [DE/DE]; Freiherr vom Stein Str. 17, 55257 Budenheim (DE). MÖLLEMANN, Angelika [DE/DE]; Merz Pharma GmbH & Co. KGaA, Eckenheimer Landstr. 100, 60318 Frankfurt am Main (DE). ALTHAUS, Michael [DE/DE]; Merz Pharma GmbH & Co. KGaA, Eckenheimer Landstr. 100, 60318 Frankfurt am Main (DE). TREEDER, Rolf-Detlef [DE/DE]; Theodor-Storm-Weg 11, 55127 Mainz (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

(48) Date of publication of this corrected version:

10 March 2005

(15) Information about Correction:

see PCT Gazette No. 10/2005 of 10 March 2005, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/009421 A2

(54) Title: THE USE OF 1-AMINO-ALKYLCYCLOHEXANE COMPOUNDS IN THE TREATMENT OF PAIN HYPERSENSITIVITY

(57) Abstract: The invention relates to a novel use of 1-amino-alkylcyclohexane NMDA receptor antagonists such as neramexane in the treatment of pain hypersensitivity and neuropathic pain.